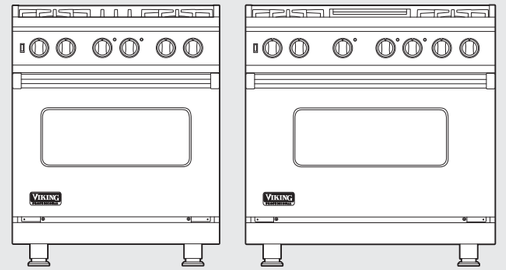
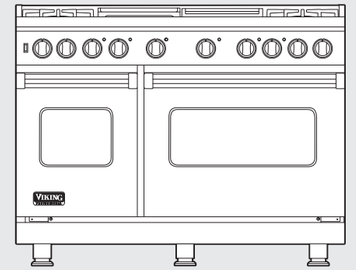
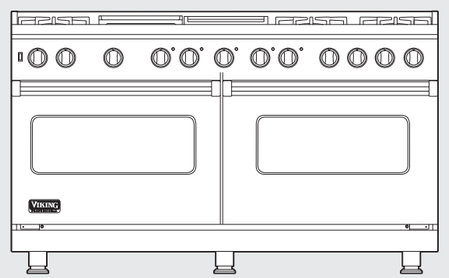
Viking Installation Guide







Professional Freestanding Gas & Gas Self-Clean Sealed Burner Ranges

Viking Range Corporation

111 Front Street

Greenwood, Mississippi 38930 USA

(662) 455-1200

For product information,

call 1-888-VIKING1 (845-4641)

or visit the Viking Web site at

vikingrange.com

F20543 EN

(100308J)

Table of Contents

Warnings & Important Safety Instructions ____ 3
Dimensions ____ 6
Specifications ____ 8
Clearance Dimensions (Proximity to Cabinets) ____ 10
Clearance Dimensions (Wood/Composite Overlay) ____ 11
Electrical & Gas Requirements ____ 12
General Information ____ 14
Installation ____ 15
- Door Removal ____ 15
- Leg Installation ____ 16
- Electrical Connection (3 Wire) ____ 17
- Electrical Connection (4 Wire) ____ 19
- Leveling/Adjustments/Alignment ____ 21
- Anit-tip Device Installation ____ 22
- Connecting Gas & Electrical ____ 23
- Final Installation ____ 24
- Door Replacement and Adjustment ____ 25

Final Preparation ____ 26
Performance Checklist ____ 26
Service & Registration ____ 27

IMPORTANT–Read and Follow!

- Before beginning, please read these instructions completely and carefully.
- Do not remove permanently affixed labels, warnings, or plates from product. This may void the warranty.
- All local and national codes and ordinances must be observed. Installation must conform with local codes or in the absence of codes, the National Fuel Gas Code ANSI Z223.1 INFPA54.
- The installer must leave these instructions with the consumer who should retain for local inspector's use and for future reference.

In Canada: Installation must be in accordance with the current CAN/CGA B149.1 & 2 Gas Installation codes and/or local codes. Electrical installation must be in accordance with the current CSA C22.1 Canadian Electrical Codes Part 1 and/or local codes.

In Massachusetts: All gas products must be installed by a "Massachusetts" licensed plumber or gasfitter. A "T" type handle manual valve must be installed in the gas supply line to the appliance.

Your safety and the safety of others is very important.

We have provided many important safety messages in this manual and on your appliance. Always read and obey all safety messages.

⚠ This is the safety alert symbol. This symbol alerts you to hazards that can kill or hurt you and others.

All safety messages will be preceded by the safety alert symbol and the word "DANGER," "WARNING" or "CAUTION." These words mean:

⚠ DANGER

Hazards or unsafe practices which WILL result in severe personal injury or death

⚠ WARNING

Hazards or unsafe practices which COULD result in severe personal injury or death

⚠ CAUTION

Hazards or unsafe practices which COULD result in minor personal injury or property damage.

All safety messages will identify the hazard, tell you how to reduce the chance of injury, and tell you what can happen if the instructions are not followed.

IMPORTANT—Read and Follow!

⚠ DANGER

Fire/explosion hazard.
IF THE INFORMATION IN THIS MANUAL IS NOT FOLLOWED EXACTLY, A FIRE OR EXPLOSION MAY RESULT CAUSING PROPERTY DAMAGE, PERSONAL INJURY, OR DEATH.

- **DO NOT** store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- **WHAT TO DO IF YOU SMELL GAS:**
  - –**DO NOT** try to light any appliance.
  - –**DO NOT** touch any electrical switch; **DO NOT** use any phone in your building.
  - –Immediately call your gas supplier from a neighbor's phone.
  - –Follow the gas supplier's instructions.
  - –If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency, or the gas supplier.

⚠ DANGER

ELECTRICAL SHOCK HAZARD
To avoid risk of electrical shock, personal injury or death; verify your appliance has been properly grounded in accordance with local codes or in absence of codes, with the National Electrical Code (NEC). ANSI/NFPA 70-latest edition.

⚠ DANGER

CHEMICAL HAZARD
To avoid risk of property damage and/or personal injury or death; this appliance is not too be used as a heating source.

- Benzene is a chemical which is part of the gas supply to this cooking product, which is consumed in the flames during combustion. Exposure to a small amount of benzene is possible if a gas leak occurs. Formaldehyde and soot are by-products of incomplete combustion.
- This appliance contains or produces chemicals which can cause serious injury or death and which are known to the state of California to cause cancer, birth defects or other reproductive harm. To reduce the risk from substances in the fuel or from fuel combustion make sure this appliance is installed, operated, and maintained in accordance to the instructions in this document.

⚠ WARNING

MOVING HAZARD
To avoid risk of severe personal injury; this appliance requires two or more personnel while handling and moving. Possible use of appliance moving devices is recommended.

⚠ WARNING

TIPPING HAZARD
To reduce the risk of property damage or personal injury; install anti-tipping device provided in accordance with the installation instructions in this document. Device must be engaged properly to prevent product from tipping over.

- This range can tip.
- Injuries to persons can result.
- Install anti-tip device packed with range.
- See installation instructions.

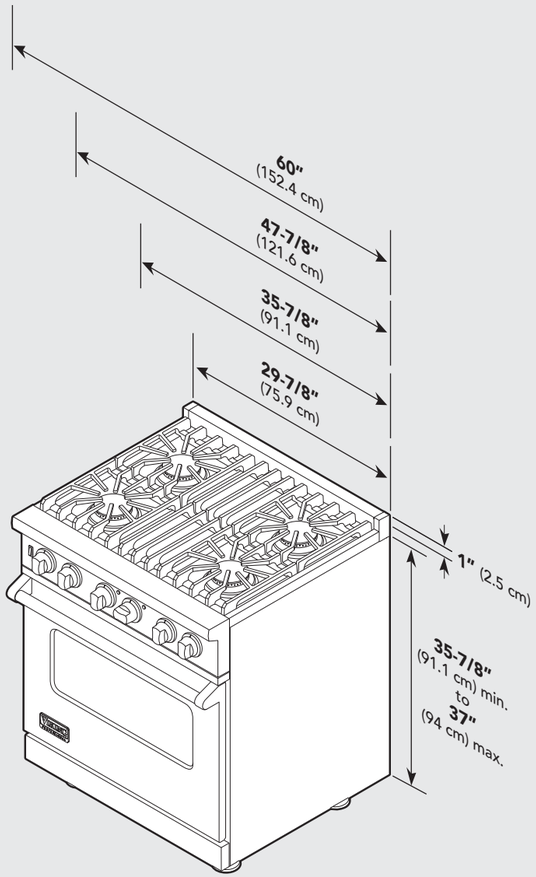
⚠ DANGER

GAS LEAK HAZARD
To avoid risk of personal injury or death; leak testing of the appliance must be conducted according to the manufacturer's instructions. Before placing appliance in operation, always check for gas leaks with soapy water solution.

- **DO NOT USE AN OPEN FLAME TO CHECK FOR GAS LEAKS.**

Dimensions

Gas 30”, 36”, 48” and 60” W. Ranges



Note: *Unit shown with standard island trim.*

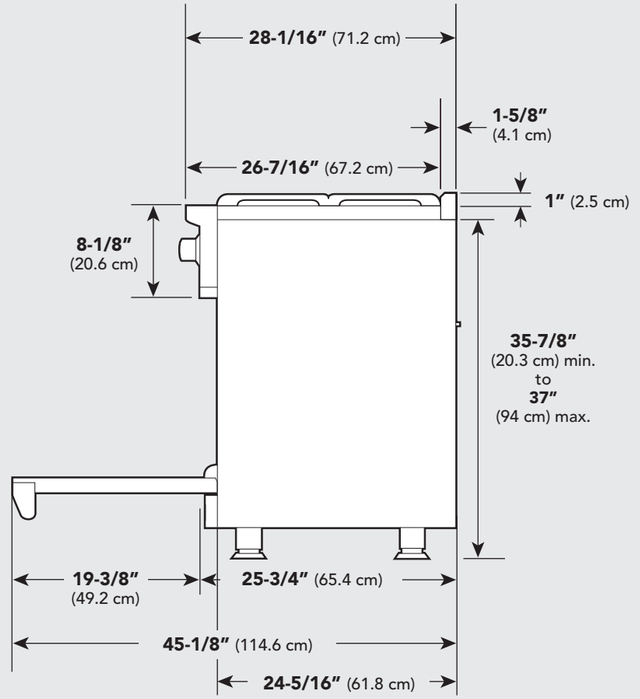
Note: *30” VGSC self-clean ranges are 3/8” (1 cm) deeper than 30” VGCC non self-clean ranges.*

Note: *36” and 48” VGSC self-clean ranges are 3/4” (1.9 cm) deeper than 36” and 48” VGCC non self-clean ranges.*

*****A standoff is included on each VGSC model range and is required for installation against a combustible wall. These standoffs can easily be removed if installing against a non-combustible wall.

Dimensions

Gas 30”, 36”, 48” and 60” W. Ranges



Note: *Unit shown with standard island trim.*

Specifications

Gas 30” and 36” W. Ranges

Description	30” W. Models	36” W. Models
Overall width	29-7/8” (75.9 cm)	35-7/8” (91.1 cm)
Overall height	To top of side trim - 35-7/8” (91.1 cm) min 37” (94.0 cm) max Legs adjust - 1-1/8” (2.9 cm)	
Overall depth from rear*	To end of side panel - 24-5/16” (61.8 cm) To front of door - 25-3/4” (65.4 cm) To end of landing ledge - 28-1/16” (71.2 cm) To end of door handle - 28-11/16” (72.9 cm) *Add 3/8” (1 cm) to overall depth for 30” VGSC models and 3/4” (1.9 cm) for 36” VGSC models installed against a combustible wall.	
Additions to Base Height	To top of island trim - add 1” (2.5 cm) To top of backguard - add 8” (20.3 cm) To top of high shelf - add 23-1/2” (59.7 cm)	
Gas Requirements	Shipped Natural or LP/Propane, field convert with conversion kit (purchased separately); accepts standard residential 1/2” (1.3 cm) ID gas service line	
Gas Manifold Pressure	Natural 5.0” W.C.P./ Liquid Propane L/P 10.0” W.C.P.	
Electrical Requirements	120VAC/60 Hz; 4 ft. (121.9 cm), 3-wire cord with grounded 3-prong plug attached to unit	
Max Amp Usage	.83 amps	1.5 amps
Surface Burner Rating Natural/LP	18,500 BTU (5.4 kW)/16,600 BTU (4.9 kW) 15,000 BTU (4.4 kW)/12,500 BTU (3.7 kW)	
Griddle Burner Rating	NA	15,000 BTU Nat./12,500 BTU LP/Propane (4.4 kW Nat/ 3.7 kW LP)
Grill Burner Rating	NA	18,000 BTU Nat./16,000 BTU LP/Propane (5.3 kW Nat/ 4.7 kW LP)
Oven(s) Interior Width	23” (58.4 cm)	29” (73.7 cm)
Oven(s) Interior Height	16-1/8” (40.9 cm)	
Oven(s) Interior Depth	Overall - 18-3/4” (47.6 cm) VGCC AHAM 17” (43.2 cm) VGSC AHAM 15-3/8” (39.1 cm)	
Oven(s) Volume Overall AHAM	4.0 cu. ft. VGCC - 3.7 cu. ft. VGSC - 3.3 cu. ft.	5.1 cu. ft. VGCC - 4.6 cu. ft. VGSC - 4.2 cu. ft.
Approximate shipping weight	410 lbs. (184.5 kg)	500 lbs. (225 kg)

Minimum clearances from adjacent combustible construction:
Below cooking surface (36” [91.4 cm] and below)

- Sides - 0”
- Top grate support - 36” (91.4 cm)

Above cooking surface (above 36” [91.4 cm])

- Sides - 6” (15.2 cm)
- Within 6” (15.2 cm) side clearance, wall cabinets no deeper than 13” (33.0 cm) must be minimum 18” (45.7 cm) above cooking surface
- Wall cabinets directly above product must be a minimum of 42” (106.7 cm) above cooking surface
- Rear - 0” with 8” backguard or high shelf; 0” with island trim and non-combustible rear wall;
- 6” (15.2 cm) with island trim and combustible rear wall

Specifications

Gas 48” and 60” W. Ranges

Description	48” W. Models	60” W. Models (VGCC only)
Overall width	47-7/8” (121.6 cm)	60”(152.4 cm)
Overall height	To top of side trim - 35-7/8” (91.1 cm) min 37” (94.0 cm) max Legs adjust - 1-1/8” (2.9 cm)	
Overall depth from rear	To end of side panel - 24-5/16” (61.8 cm) To front of door - 25-3/4” (65.4 cm) To end of landing ledge - 28-1/16” (71.2 cm) To end of door handle - 28-11/16” (72.9 cm) *Add 3/4” (1.9 cm) to overall depth for 48” VGSC models installed against a combustible wall.	
Additions to Base Height	To top of island trim - add 1” (2.5 cm) To top of backguard - add 8” (20.3 cm) To top of high shelf - add 23-1/2” (59.7 cm)	
Gas Requirements	Shipped Natural or LP/Propane, field convert with conversion kit (purchased separately); accepts standard residential 1/2” (1.3 cm) ID gas service line	
Gas Manifold Pressure	Natural 5.0” W.C.P./ Liquid Propane L/P 10.0” W.C.P.	
Electrical Requirements	120VAC/60 Hz; 4 ft. (121.9 cm), 3-wire cord with grounded 3-prong plug attached to unit	
Max Amp Usage	1.89 amps	1.66 amps
Surface Burner Rating Natural/LP	18,500 BTU (5.4 kW)/16,600 BTU 4.9 kW) 15,000 BTU (4.4 kW)/12,500 BTU (3.7 kW)	
Griddle Burner Rating	15,000 BTU Nat./12,500 BTU LP/Propane (4.4 kW Nat/ 3.7 kW LP	
Grill Burner Rating	18,000 BTU Nat./16,000 BTU LP/Propane (5.3 kW Nat/ 4.7 kW LP	
Oven(s) Interior Width	Right - 23” (58.4 cm) Left - 12-1/8” (30.8 cm)	23” (58.4 cm)
Oven(s) Interior Height	16-1/8” (40.9 cm)	
Oven(s) Interior Depth	Overall - 18-3/4” (47.6 cm) AHAM 17” (43.2 cm)	
Oven(s) Volume Overall AHAM	Right - 4.0 cu. ft. Left - 2.1 cu. ft. Right VGCC - 3.7 cu. ft. Left - 2.0 cu. ft. Right VGSC - 3.3 cu. ft. Left - 2.0 cu. ft.	Both Ovens 4.0 cu. ft. Both Ovens 3.7 cu. ft.
Approximate shipping weight	575 lbs. (258.8 kg)	750 lbs. (337.5 kg)

Minimum clearances from adjacent combustible construction:
Below cooking surface (36” [91.4 cm] and below)

- Sides - 0”
- Top grate support - 36” (91.4 cm)

Above cooking surface (above 36” [91.4 cm])

- Sides - 6” (15.2 cm)
- Within 6” (15.2 cm) side clearance, wall cabinets no deeper than 13” (33.0 cm) must be minimum 18” (45.7 cm) above cooking surface
- Wall cabinets directly above product must be a minimum of 42” (106.7 cm) above cooking surface
- Rear - 0” with 8” backguard or high shelf; 0” with island trim and non-combustible rear wall;
- 6” (15.2 cm) with island trim and combustible rear wall

Clearance Dimensions (Proximity to Cabinets)

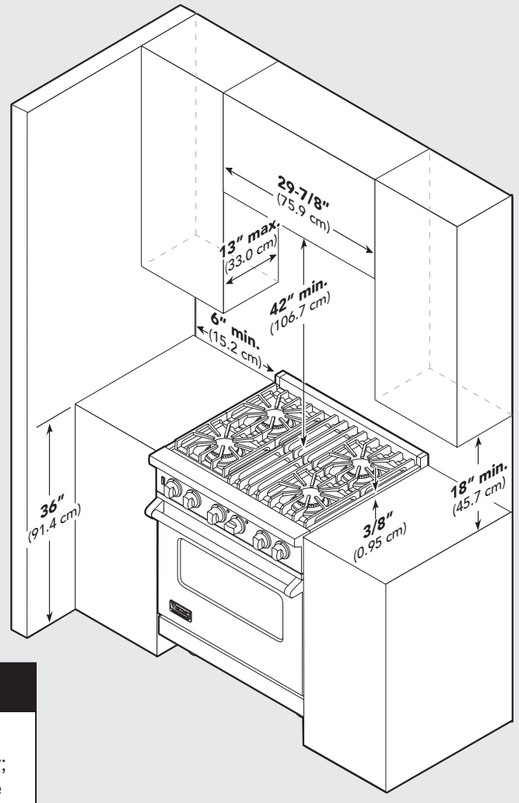
- This range may be installed directly adjacent to existing 36" (91.4 cm) high base cabinets.

  IMPORTANT: The side trim MUST be 3/8" (.95 cm) above the adjacent base cabinet countertop. This can be accomplished by raising the unit using the adjustment spindles on the legs.

- The range CANNOT be installed directly adjacent to sidewalls, tall cabinets, tall appliances, or other side vertical surfaces above 36" (91.4 cm) high. There must be a minimum of 6" (15.2 cm) side clearance from the range to such combustible surfaces above the 36" (91.4 cm) counter height.

- Within the 6" (15.2 cm) side clearance to combustible vertical surfaces above 36" (91.4 cm), the maximum wall cabinet depth must be 13" (33.0 cm) and wall cabinets within this 6" (15.2 cm) side clearance must be 18" (45.7 cm) above the 36" (91.4 cm) high countertop.

- Wall cabinets above the range must be a minimum of 42" (106.7 cm) above the range cooking surface for the full width of the range. This minimum height requirement does not apply if a range hood is installed over the cooking surface.



Note: *Minimum clearance for back wall is 0" with backguard or high-shelf.*

Note: *If a range hood is installed, wall cabinets above the range have a different minimum clearance height.*

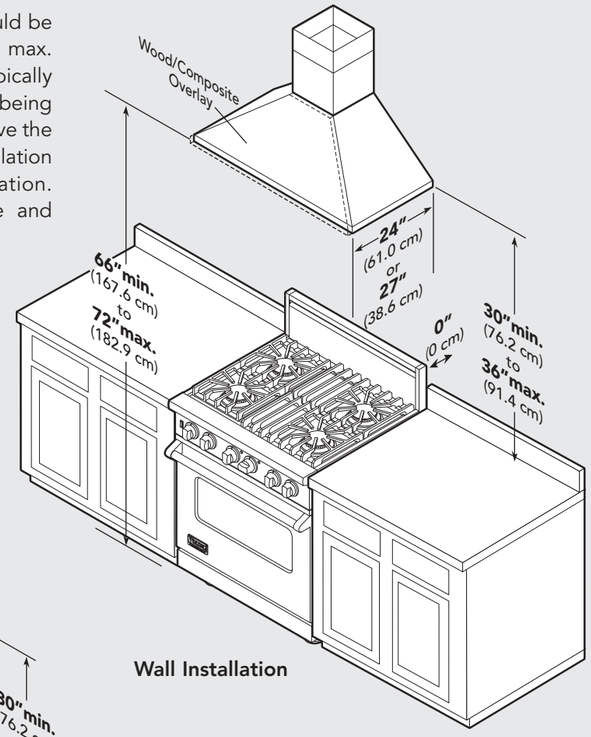
⚠ CAUTION

Burn hazard

To avoid risk of personal injury; the use of cabinets for storage above the appliance may result in a potential burn hazard. Combustible items may ignite, metallic items may become hot and cause burns. If a cabinet storage is to be provided the risk can be reduced by installing a rangehood that projects horizontally a minimum 5" (12.7 cm) beyond the bottom of cabinets.

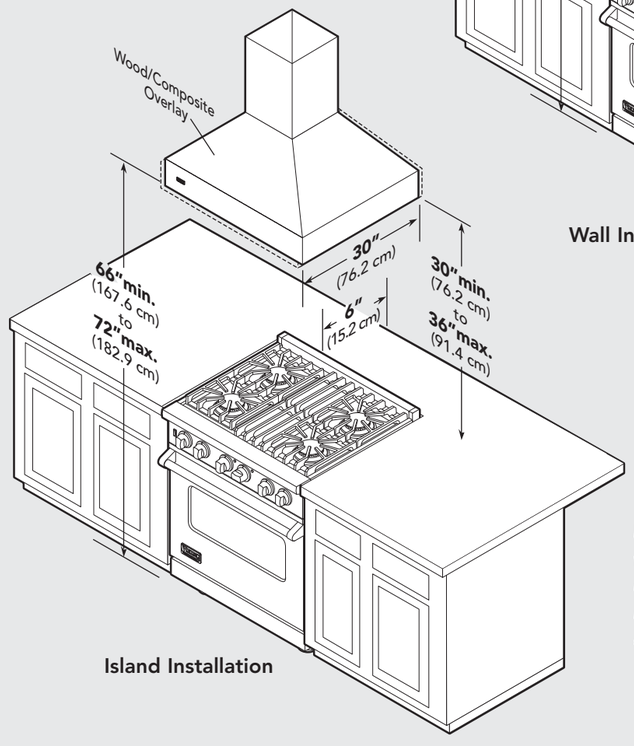
Clearance Dimensions (Wood/Composite Overlay)

The bottom of a standard hood should be 30" (76.2 cm) min. to 36" (91.4 cm) max. above the countertop. This would typically result in the bottom of the hood being 66" (167.6 cm) to 72" (182.9 cm) above the floor. Refer to the range hood installation instructions for additional information. These dimensions provide for safe and efficient operation of the hood.



Wall Installation

Note: *Minimum clearance for back wall is 0" with backguard or high-shelf. See Standoff Bracket Removal section to allow 0" clearance.*



Island Installation

Important: *This range comes standard with an Island Trim. There must be a minimum of 6" (15.2 cm) clearance from rear of range to a* ***combustible*** *wall or 0" clearance to a* ***non-combustible*** *wall.*

Electrical & Gas Requirements

Electrical Requirements
Check your national and local codes regarding this unit. This range requires 120VAC/60 Hz; 4 ft. (121.9 cm), 3-wire cord with grounded 3-prong plug attached to unit. See "Electrical Connection" section for grounding instructions. Must be fused seperately from any other circuit.

⚠ WARNING

ELECTRICAL SHOCK HAZARD
To avoid the risk of electrical shock, personal injury or death; verify electrical power is turned off at the breaker box and gas supply is turned off until the range is installed and ready to operate, installation by an authorized installer only.

Gas Connection
The gas supply (service) line must be the same size or greater than the inlet line of the appliance. This range uses a 1/2" (1.3 cm) ID NPT (Sch40) inlet. Sealant on all pipe joints must be resistive to LP gas.

The range is designed specifically for natural gas or liquid propane (LP) gas. Before beginning installation verify that the model is compatible with the intended gas supply.

Manual shut-off valve:
This installer-supplied valve must be installed in the gas service line before the appliance in the gas stream and in a location where it can be reached quickly in the event of an emergency. Any opeing behind the range shall be sealed.

In Massachusetts: A "T" handle type manual valve must be installed in the gas supply line to the appliance.
IMPORTANT: Any conversion required must be performed by your dealer or a qualified licensed plumber or gas service company. Please provide the service person with this manual before work begins.

Pressure Regulator:
- All heavy-duty, commercial type cooking equipment must have a pressure regulator on the incoming service line for safe and efficient operation, since service pressure may fluctuate with local demand. External regulators are not required on this range since a regulator is built into each unit at the factory. Under no condition bypass this built-in regulator.

- Manifold pressure should be checked with a manometer, natural gas requires 5.0" W.C.P. and LP gas requires 10.0" W.C.P. Incoming line pressure upstream from the regulator must be 1" W.C.P. higher than the manifold pressure in order to check the regulator. The regulator used on this range can withstand a maximum input pressure of 1/2" PSI (14.0" W.C.P.). If the line pressure is in excess of that amount, a step down regulator will be required.

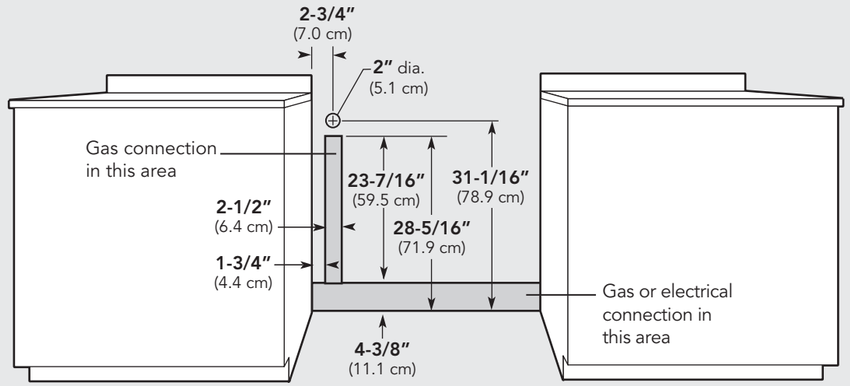
- The appliance must be disconnected from the gas supply piping system during any pressure testing of that system.

Electrical & Gas Requirements

Flexible Connections:
If the unit is to be installed with flexible couplings and/or quick-disconnect fittings, the installer must use a heavy-duty AGA design-certified flexible connector of at least 1/2" (1.3 cm) ID NPT (with suitable strain reliefs) in compliance with ANSI Z21.41 and Z21.69.

In Canada: CAN 1-6, 10-88 metal connectors for gas appliances and CAN 1-6.9 M79 quick disconnect devices for use with gas fuel.

In Massachusetts: This appliance must be installed with a 36" (3-foot) long flexible gas connector.



General Information

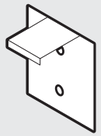
READ AND FOLLOW ALL WARNING AND CAUTION INFORMATION WHEN INSTALLING THIS APPLIANCE.

- All openings in the wall behind the appliance and in the floor under the appliance must be sealed.
- Do not obstruct the flow of combustion and ventilation air.

Moving, Handling, and Unpacking
Remove and discard all packing materials, including cardboard and tape on the outside and inside of the range.

Remove the burner grates and styrofoam off the top cooking surface. Be sure to remove the burner caps packaged in styrofoam below the burner grates.

Do not discard the anti-tip metal bracket supplied with the range. This is the anti-tip device and must be installed with the unit. *Refer to "Anti-tip Device Installation" section.*



Some stainless steel parts may have a plastic protective wrap which must be peeled off. The interior should be washed thoroughly with hot, soapy water to remove film residues and any dust or debris before being used, then rinsed and wiped dry. Solutions stronger than soap and water are rarely needed.

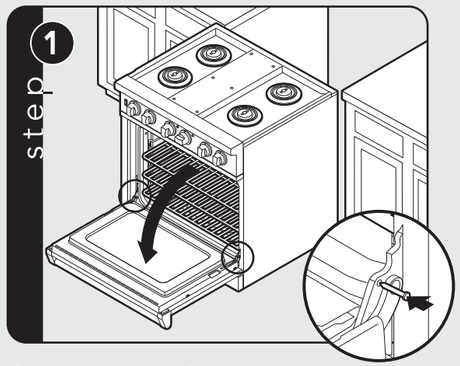
Installation

⚠ NOTICE

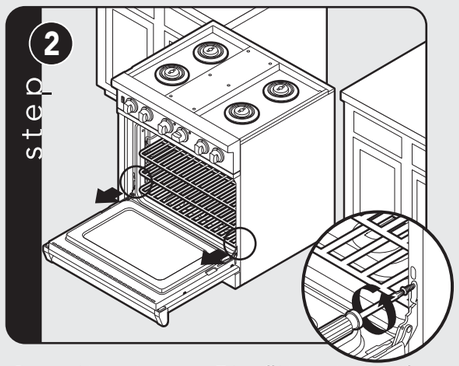
DO NOT use the handle or oven door to lift the oven. Remove door before installation to ensure that it is not used to lift the unit. **DO NOT** lift or carry the door by the handle.

Removing the door must be done by your dealer, a qualified licensed plumber, or certified gas installer.

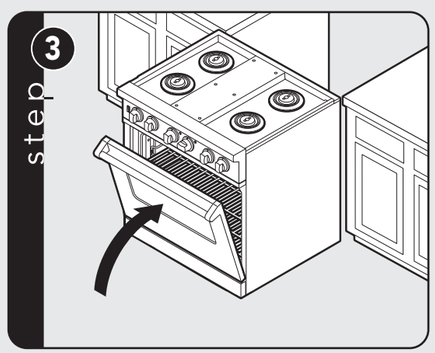
Door Removal



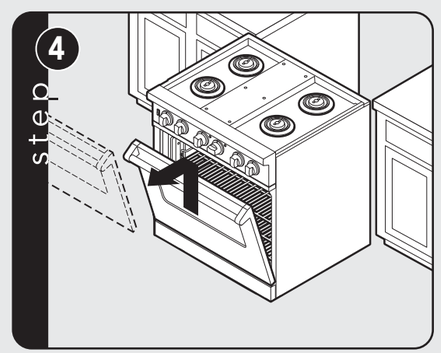
Open door completely. Place pins, supplied with unit, in pin hole. For personal safety, ONLY use pins supplied with the unit.



Remove hinge trim screws. Take off hinge trim. Identify right and left hinge for future re-installation.

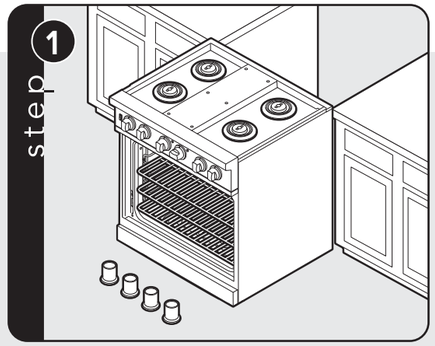


Close until pins stop door.

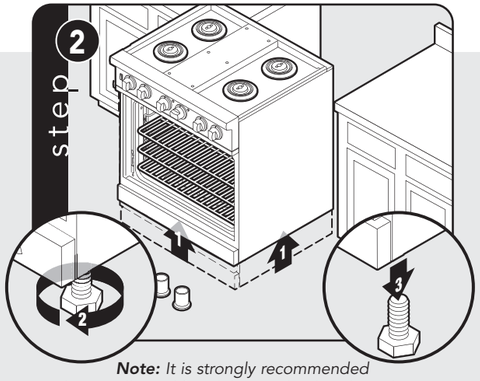


Lift door up and out.

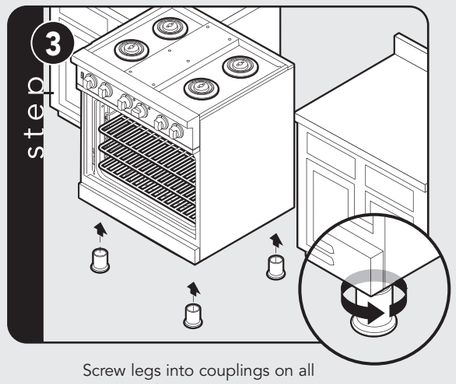
Leg Installation



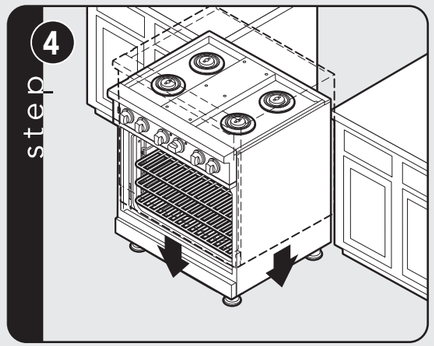
Legs are packed in styrofoam top pack.
Note: *Legs should be installed near to where appliance is to be used, as they are not secure for long transit.*



Note: *It is strongly recommended that a pallet or lift jack be used rather than tilting. Raise unit about a foot. Unscrew temporary legs from couplings on all four corners.*

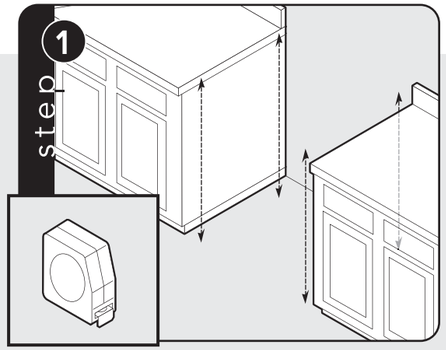


Screw legs into couplings on all four corners.

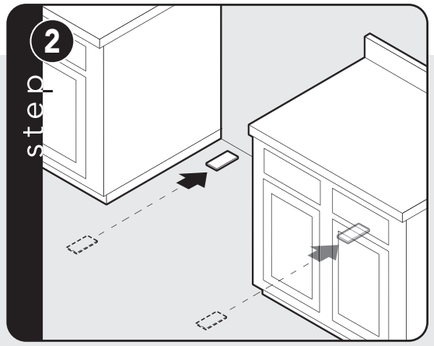


Lower range gently to keep any undue strain from legs and internal mounting hardware.

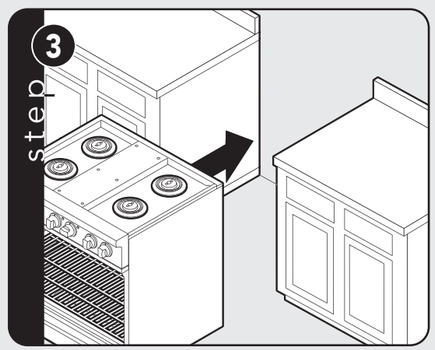
Leveling/Adjustments/Alignment



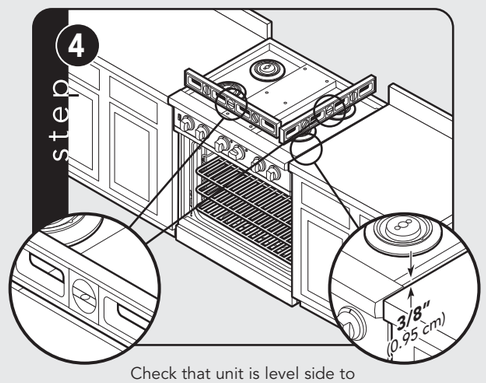
Measure the four corners in cutout area to verify if flooring is level.



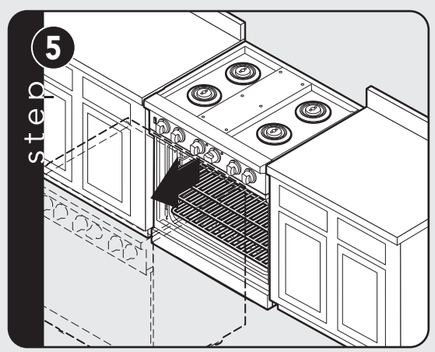
For uneven or sloped floors, level unit with metal shims only, as the adjustment required may exceed the thread available in the leg.



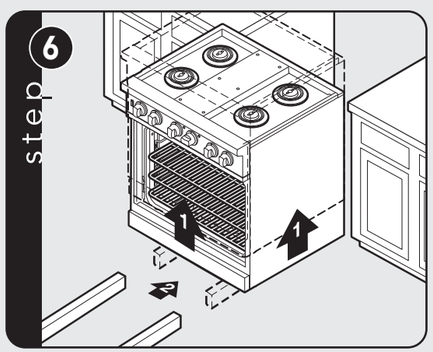
Move unit into opening.



Check that unit is level side to side and front to back. Side trim of the high corner must be 3/8" (0.95 cm) above countertop.

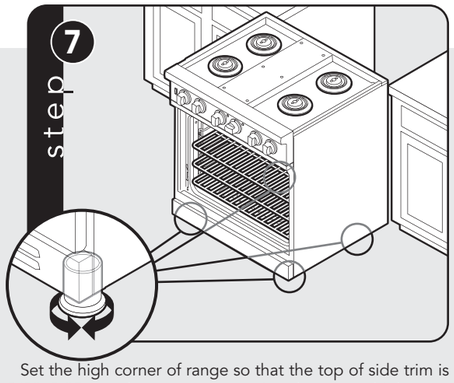


If leveling is required, move unit out of opening.



Lift unit and prop on wood blocks.

Leveling/Adjustments/Alignments (cont.)



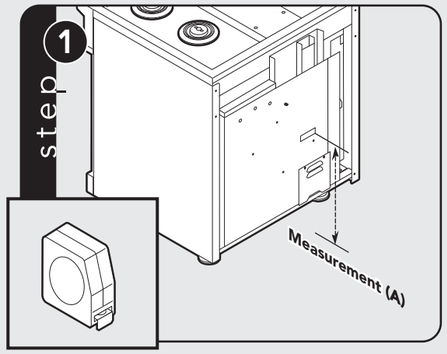
Set the high corner of range so that the top of side trim is 3/8" (0.95 cm) above countertop. Level range to high corner.

Anti-tip Device Installation

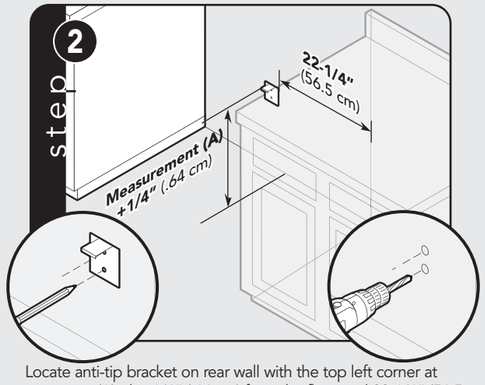
⚠ WARNING

TIPPING HAZARD

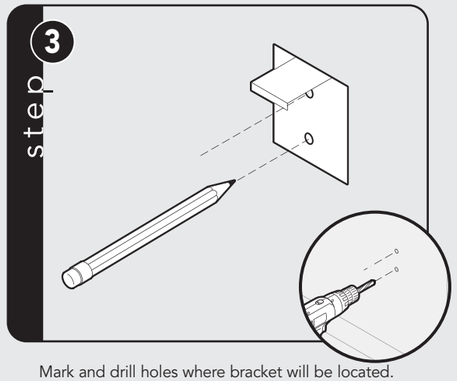
To reduce the risk of property damage or personal injury; install anti-tipping device provided in accordance with the installation instructions in this document. Device must be engaged properly to prevent product from tipping over.



Measure from floor to bottom of the anit-tip opening located on the back of range. This will be measurement (A).

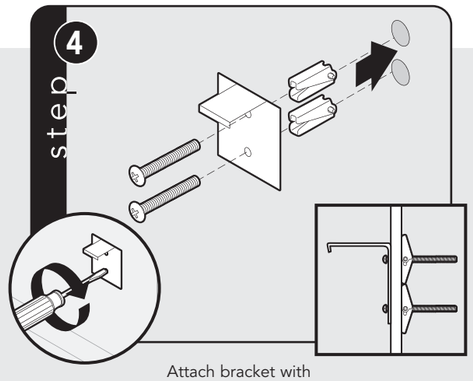


Locate anti-tip bracket on rear wall with the top left corner at measurement (A) plus 1/4" (.64 cm) from the floor and 22-1/4" (56.5 cm) from where the right side of range (facing range) is to be located.



Mark and drill holes where bracket will be located.

Anti-tip Device Installation (cont.)



Attach bracket with mounting hardware provided.

Connecting Gas & Electric

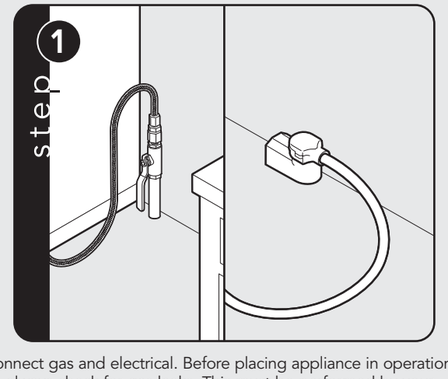
⚠ DANGER

GAS LEAK HAZARD

To avoid risk of personal injury or death; leak testing of the appliance must be conducted according to the manufacturer's instructions. Before placing appliance in operation, always check for gas leaks with soapy water solution.

- **DO NOT USE AN OPEN FLAME TO CHECK FOR GAS LEAKS.**

Note: *Refer to electrical and gas requirements section for proper installation information.*



Connect gas and electrical. Before placing appliance in operation, always check for gas leaks. This must be performed by your dealer, a qualified licensed plumber, or gas service company.

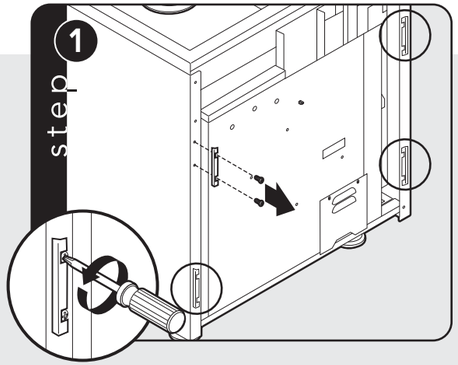
Standoff Bracket Removal (VGSC Self-Clean Models Only)

Note: *Standoff brackets can only be removed if range is installed against a* ***NON-COMBUSTIBLE*** *wall.*

⚠ DANGER

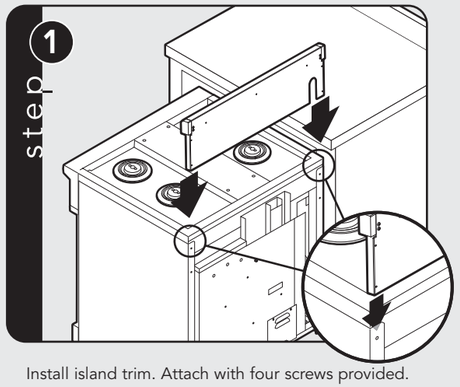
FIRE HAZARD

Standoff brackets provide a 3/8” barrier between back of range and rear wall. These must be in place for adequete ventilation. The standoff brackets may only be removed if range is installed against a non-combustible wall.

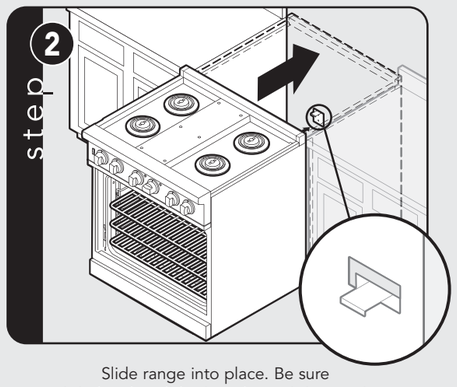


Unscrew four standoff brackets and remove.

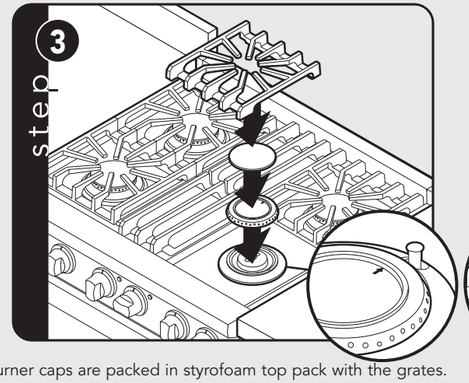
Final Installation



Install island trim. Attach with four screws provided.

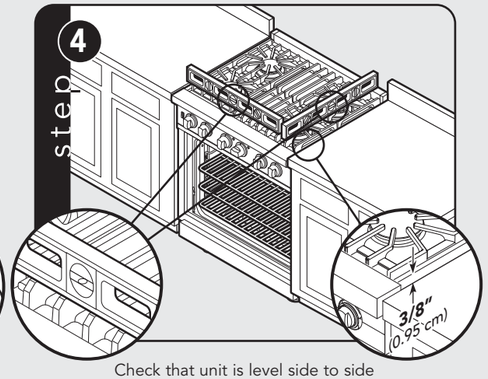


Slide range into place. Be sure anti-tip bracket slides into the anti-tip opening.



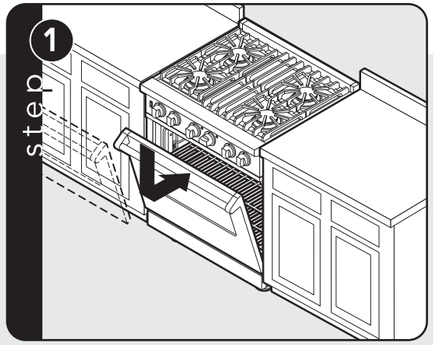
Burner caps are packed in styrofoam top pack with the grates. Place burner on top of range. Place burner grate on top of burner cap and grate support.

Note: *Arrow on burner cap must be pointing towards back of range.*

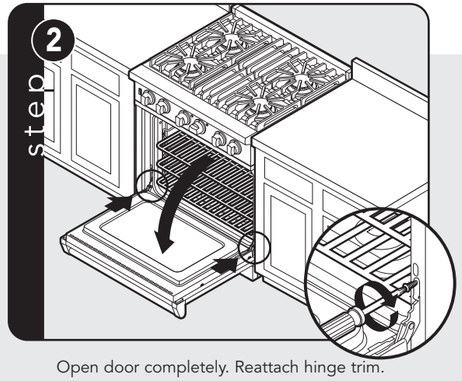


Check that unit is level side to side and front to back. The side trim must be 3/8” (0.95 cm) above countertop. If unit is not level repeat steps 5-7 of “Leveling/Adjustments/Alignment” section.

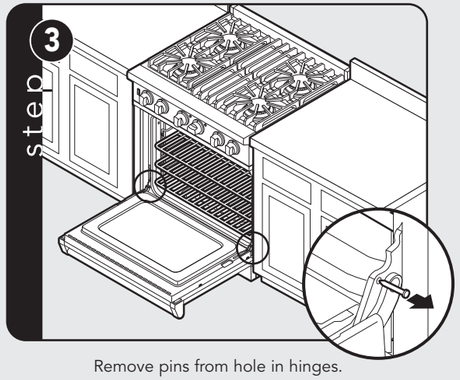
Door Replacement and Adjustment



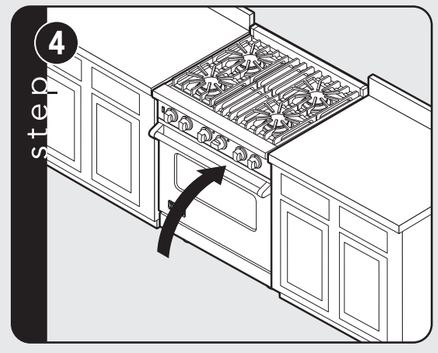
Reattach door to range.



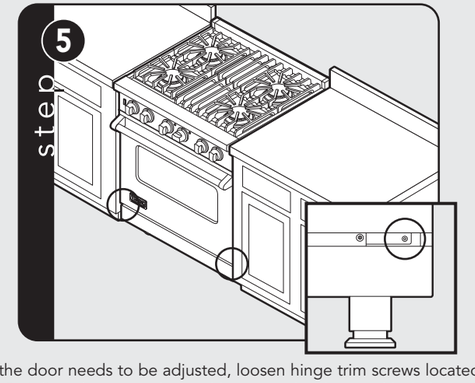
Open door completely. Reattach hinge trim.



Remove pins from hole in hinges.



Close door.



If the door needs to be adjusted, loosen hinge trim screws located in step 2. Adjust the screws located between the door and kickplate using a 5/32” hex head allen wrench. After adjustment, tighten hinge trim screws.

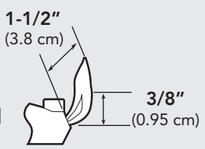
Final Preparation

- All stainless steel body parts should be wiped with hot, soapy water and with a liquid cleaner designed for this material. If buildup occurs, **DO NOT** use steel wool, abrasive cloths, cleansers, or powders! If it is necessary to scrape stainless steel to remove encrusted materials, soak with hot, wet cloths to loosen the material, then use a wool or nylon scraper. **DO NOT** use a metal knife, spatula, or any other material tool to scrape stainless steel! Scratches are almost impossible to remove.

Performance Checklist

A qualified installer should carry out the following checks:

☐ Check top burner ignition. See drawing for proper flame height on HI. The low flame should light at every port.



☐ Check oven bake function—bake burner on full power.

☐ Check Convection bake function—bake and broil burners the same with the convection fan on (VGSC self-clean models).

☐ Check convection broil function—broil burner at full power with convection fan on (VGSC self-clean models).

☐ Check convection fan function—convection fan comes on when switch is turned on (VGCC models).

☐ For self-cleaning models check self-clean function—door will lock in approximately 30 seconds, the center and outside broil elements will turn on and the bake element will turn on at partial power. Check broil elements through window to make sure they are on, then abort self-clean cycle to unlock door.

⚠ NOTICE

When conducting performance test, **DO NOT** run self-clean cycle for more than 10 minutes with oven racks inside oven. This could cause them to discolor due to the high temperature required for self-cleaning.

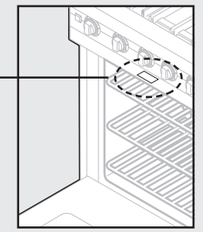
Service & Registration

Only authorized replacement parts may be used in performing service on the appliance. All servicing should be referred to a qualified technician.

Contact Viking Range Corporation, 1-888-VIKING1 (854-4641), for the nearest service parts distributor in your area or write to:

VIKING RANGE CORPORATION
PREFERRED SERVICE
1803 Hwy 82W
Greenwood, Mississippi 38930 USA

The serial number and model number for your appliance can be found by opening the door and looking under the control panel.



Record the following information indicated below. You will need it if service is ever required.

Model number _____

Serial number _____

Date of purchase _____

Date installed _____

Dealer's name _____

Address _____

These installation instructions should remain with the unit for future reference.